

## Publications from the Pharmaceutics research group 2012 - 2022

Total # of publications: 183

2022 : 15 publ.

Andreassen, R. Christel; Rønning, Sissel Beate; Solberg, Nina Therese; Grønlien, Krister Gjestvang; Kristoffersen, Kenneth Aase; Høst, Vibeke; Kolset, Svein Olav; Pedersen, Mona Elisabeth.

Production of food-grade microcarriers based on by-products from the food industry to facilitate the expansion of bovine skeletal muscle satellite cells for cultured meat production. *Biomaterials* 2022 ;Volum 286.

Azumah, Joseph; Smistad, Gro; Hiorth, Marianne.

Preparation of stable polymer-liposome complexes by a novel approach employing a one-pot method. *Colloids and Surfaces A: Physicochemical and Engineering Aspects* 2022 ;Volum 653. s. -

Corazza, Elisa; Abruzzo, Angela; Giordani, Barbara; Cerchiara, Teresa; Bigucci, Federica; Vitali, Beatrice; Di Cagno, Massimiliano Pio; Luppi, Barbara.

Human Lactobacillus Biosurfactants as Natural Excipients for Nasal Drug Delivery of Hydrocortisone. *Pharmaceutics* 2022 ;Volum 14.(3)

Corazza, Elisa; Di Cagno, Massimiliano Pio; Bauer-Brandl, Annette; Abruzzo, Angela; Cerchiara, Teresa; Bigucci, Federica; Luppi, Barbara.

Drug delivery to the brain: In situ gelling formulation enhances carbamazepine diffusion through nasal mucosa models with mucin. *European Journal of Pharmaceutical Sciences* 2022 ;Volum 179. s. -

Frigaard, Julie Mari; Jensen, Janicke Liaaen; Galtung, Hilde; Hiorth, Marianne.

The Potential of Chitosan in Nanomedicine: An Overview of the Cytotoxicity of Chitosan Based Nanoparticles. *Frontiers in Pharmacology* 2022 ;Volum 13. s. -

Grønlien, Krister Gjestvang; Pedersen, Mona Elisabeth; Rønning, Sissel Beate; Solberg, Nina Therese; Tønnesen, Hanne Hjorth.

Tuning of 2D cultured human fibroblast behavior using lumichrome photocrosslinked collagen hydrogels. *Materials Today Communications* 2022 ;Volum 31. s. -

Grønlien, Krister Gjestvang; Valen, Håkon; Ronessen Pain, Maria; Bruzell, Ellen Merete; Tønnesen, Hanne Hjorth.

Bacterial phototoxicity of lumichrome photocrosslinked collagen hydrogels. Sustainable Chemistry and Pharmacy 2022 ;Volum 31. s. -

Johnsen, Hennie Marie; Filtvedt, Werner Olav; Hiorth, Marianne; Klaveness, Jo.

Silicon nanoparticles for oral administration of molecular hydrogen. International Journal of Pharmaceutics 2022 ;Volum 629. s. -

Magnano, Greta Camilla; Sut, Stefania; Dall'Acqua, Stefano; Di Cagno, Massimiliano Pio; Lee, Luke; Lee, Ming; Filon, Francesca Larese; Perissutti, Beatrice; Hasa, Dritan; Voinovich, Dario.

Validation and testing of a new artificial biomimetic barrier for estimation of transdermal drug absorption. International Journal of Pharmaceutics 2022 ;Volum 628. s. -

Meiland, Peter; Larsen, Bjarke Strøm; Knopp, Matthias Manne; Tho, Ingunn; Rades, Thomas.

A new method to determine drug-polymer solubility through enthalpy of melting and mixing. International Journal of Pharmaceutics 2022 ;Volum 629. s. -

Nazemoroaya, Zahra; Sarafbidabad, Mohsen; Mahdieh, Athar; Zeini, Darya; Nyström, Bo.

Use of Saponinosomes from *Ziziphus spina-christi* as Anticancer Drug Carriers. ACS Omega 2022 ;Volum 7.(32) s. 28421-28433

Nezvalova-Henriksen, Katerina; Holm, Tone Huseby; Nilsson, Niklas; Kjønniksen, Inge; Tho, Ingunn.

Frequently acquired drugs in neonatal intensive care and their physical compatibility. Acta Paediatrica 2022 ;Volum 111.(12) s. 2307-2314

Nilsson, Niklas; Nguyen, Vivian; Nezvalova-Henriksen, Katerina; Tho, Ingunn.

Exploring a case of incompatibility in a complex regimen containing Plasma-Lyte 148 in the pediatric intensive care. Pediatric Anaesthesia 2022 ;Volum 33.(3) s. 211-218

Nilsson, Niklas; Storesund, Ingebjørg; Tho, Ingunn; Nezvalova-Henriksen, Katerina.

Co-administration of drugs with parenteral nutrition in the neonatal intensive care unit—physical compatibility between three components. European Journal of Pediatrics 2022 ;Volum 181. s. 2685-2693

Tzanova, Martina Martin; Moretti, Federica; Grassi, Gabriele; Stein, Paul; Hiorth, Marianne; Abrami, Michela; Grassi, Mario; Di Cagno, Massimiliano Pio.

Modelling drug diffusion through unstirred water layers allows real-time quantification of free/loaded drug fractions and release kinetics from colloidal-based formulations. European journal of pharmaceutics and biopharmaceutics 2022 ;Volum 178. s. 168-178

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Abruzzo, Angela; Parolin, Carola; Corazza, Elisa; Giordani, Barbara; Di Cagno, Massimiliano Pio; Cerchiara, Teresa; Bigucci, Federica; Vitali, Beatrice; Luppi, Barbara.

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Carmona, Pierre; Tasici, Anca Maria; Sande, Sverre Arne; Knudsen, Kenneth Dahl; Nyström, Bo.

Glyceraldehyde as an efficient chemical crosslinker agent for the formation of chitosan hydrogels. Gels 2021 ;Volum 7.(4) s. -

Govender, Rydvikha; Kissi, Eric Ofosu; Larsson, Anette; Tho, Ingunn.

Polymers in Pharmaceutical Additive Manufacturing: A Balancing Act Between Printability and Product Performance. Advanced Drug Delivery Reviews 2021 ;Volum 177. s. -

Gulin-Sarfraz, Tina; Kalantzopoulos, Georgios N.; Pettersen, Marit Kvalvåg; Åsli, Anette Wold; Tho, Ingunn; Axelsson, Lars Torsten; Sarfraz, Jawad.

Inorganic Nanocarriers for Encapsulation of Natural Antimicrobial Compounds for Potential Food Packaging Application: A Comparative Study. Nanomaterials 2021 ;Volum 11.(2)

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Influence of Drug Load on the Printability and Solid-State Properties of 3D-Printed Naproxen-Based Amorphous Solid Dispersion. Molecules 2021 ;Volum 26.(15)

Nystedt, Helene Liepelt; Grønlien, Krister Gjestvang; Tønnesen, Hanne Hjorth.

Interactions of natural deep eutectic solvents (NADES) with artificial and natural membranes. *Journal of Molecular Liquids* 2021 ;Volum 328. s. -

Reinseth, Ingvild; Tønnesen, Hanne Hjorth; Carlsen, Harald; Diep, Dzung B..

Exploring the Therapeutic Potential of the Leaderless Enterocins K1 and EJ97 in the Treatment of Vancomycin-Resistant Enterococcal Infection. *Frontiers in Microbiology* 2021

Thapa, Raj Kumar; Diep, Dzung B.; Tønnesen, Hanne Hjorth.

Nanomedicine-based antimicrobial peptide delivery for bacterial infections: recent advances and future prospects. *Journal of Pharmaceutical Investigation (JPI)* 2021 ;Volum 51. s. 377-398

Thapa, Raj Kumar; Grønlien, Krister Gjestvang; Tønnesen, Hanne Hjorth.

Protein-based systems for topical antibacterial therapy. *Frontiers in Medical Technology* 2021 ;Volum 3.

Thapa, Raj Kumar; Winther-Larsen, Hanne Cecilie; Diep, Dzung B.; Tønnesen, Hanne Hjorth.

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Thapa, Raj Kumar; Winther-Larsen, Hanne Cecilie; Ovchinnikov, Kirill; Carlsen, Harald; Diep, Dzung B.; Tønnesen, Hanne Hjorth.

Hybrid hydrogels for bacteriocin delivery to infected wounds. *European Journal of Pharmaceutical Sciences* 2021 ;Volum 166. s. 1-10

Tzanova, Martina Martin; Randelov, Elizabeta; Stein, Paul C.; Hiorth, Marianne; Di Cagno, Massimiliano Pio.

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Alopaeus, Julia Fredrika; Göbel, Anja; Breitkreutz, Jörg; Sande, Sverre Arne; Tho, Ingunn.

Investigation of hydroxypropyl- $\beta$ -cyclodextrin inclusion complexation of two poorly soluble model drugs and their taste-sensation - Effect of electrolytes, freeze-drying and incorporation into oral film formulations. *Journal of Drug Delivery Science and Technology* 2020 ;Volum 61.

Bansal, Kuldeep Kumar; Mishra, Deepak K.; Rosling, Ari; Rosenholm, Jessica M..

Therapeutic potential of polymer-coated mesoporous silica nanoparticles. *Applied Sciences* 2020 ;Volum 10:289.(1) s. 1-24

Brustugun, Jørgen; Aas, Elisabeth Birkedal; Tho, Ingunn; Bjerknes, Kathrin.

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Brustugun, Jørgen; Notaker, Nikolai; Paetz, Lasse Holtan; Tho, Ingunn; Bjerknes, Kathrin.

Adjusting the dose in paediatric care by dispersing fragments of four different aspirin tablets. *Acta Paediatrica* 2020 ;Volum 109.(11) s. 2394-2401

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Falavigna, Margherita; Stein, Paul C.; Flaten, Gøril Eide; Di Cagno, Massimiliano Pio.

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A natural deep eutectic solvent (NADES) as potential excipient in collagen-based products. International Journal of Biological Macromolecules 2020 ;Volum 156. s. 394-402

Hagesæther, Ellen; Adamczak, Małgorzata Iwona; Hiorth, Marianne; Tho, Ingunn.

Characterization of Bioadhesion, Mucin-interactions and Mucosal Permeability of Pharmaceutical Nano- and Microsystems. I: Characterization of Pharmaceutical Nano and Microsystems. John Wiley & Sons 2020 ISBN 9781119414018. s. 171-205

Liu, JingWen; Rades, Thomas; Tho, Ingunn; Kissi, Eric Ofosu.

Functionalised calcium carbonate as a coformer to stabilize amorphous drugs by mechanochemical activation. European journal of pharmaceutics and biopharmaceutics 2020 ;Volum 155. s. 22-28

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Y-site physical compatibility of numeta g13e with drugs frequently used at neonatal intensive care. Pharmaceutics 2020 ;Volum 12.(7)

Okeyo, Peter Ouma; Larsen, Peter Emil; Kissi, Eric Ofosu; Ajalloueian, Fatemeh; Rades, Thomas; Rantanen, Jukka; Boisen, Anja.

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In-vivo optical monitoring of the efficacy of epidermal growth factor receptor targeted photodynamic therapy: The effect of fluence rate. Cancers 2020 ;Volum 12.(1) s. -

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Effect of curcumin and cosolvents on the micellization of Pluronic F127 in aqueous solution. Colloids and Surfaces B: Biointerfaces 2020 ;Volum 195. s. -

Thapa, Raj Kumar; Winther-Larsen, Hanne Cecilie; Diep, Dzung B.; Tønnesen, Hanne Hjorth.  
Preformulation studies on novel garvicin KS peptides for topical applications. European Journal of Pharmaceutical Sciences 2020 ;Volum 151. s. -

Tzanova, Martina; Hagesæther, Ellen; Tho, Ingunn.

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Jerjes, Waseem; Theodossiou, Theodosios; Hirschberg, Henry; Høgset, Anders; Weyergang, Anette; Selbo, Pål Kristian; Hamdoon, Zaid; Hopper, Colin; Berg, Kristian.

Photochemical Internalization for Intracellular Drug Delivery. From Basic Mechanisms to Clinical Research. Journal of Clinical Medicine 2020 ;Volum 9.(2) s. -

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Adrover, Alessandra; Paolicelli, Patrizia; Petralito, Stefania; Di Muzio, Laura; Trilli, Jordan; Cesa, Stefania; Tho, Ingunn; Casadei, Maria Antonietta.

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Alopaeus, Julia Fredrika; Hagesæther, Ellen; Tho, Ingunn.

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Brustugun, Jørgen; Notaker, Nikolai; Paetz, Lasse Holtan; Tho, Ingunn; Bjerknes, Kathrin.

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Dabkowska, Maria; Roginska, Dorota; Kłos, Patrycja; Sobus, Anna; Adamczak, Małgorzata Iwona; Litwńska, Zofia; Machałinska, Anna; Machałinski, Bogusław.

Electrostatic complex of neurotrophin 4 with dendrimer nanoparticles: controlled release of protein in vitro and in vivo. International Journal of Nanomedicine 2019 ;Volum 14. s. 6117-6131

Di Cagno, Massimiliano Pio; Stein, Paul C.

Studying the effect of solubilizing agents on drug diffusion through the unstirred water layer (UWL) by localized spectroscopy. European journal of pharmaceutics and biopharmaceutics 2019 ;Volum 139. s. 205-212

Grønlien, Krister Gjestvang; Pedersen, Mona Elisabeth; Sanden, Karen Wahlstrøm; Høst, Vibeke; Karlsen, Jan; Tønnesen, Hanne Hjorth.

Collagen from Turkey (*Meleagris gallopavo*) tendon: A promising sustainable biomaterial for pharmaceutical use. Sustainable Chemistry and Pharmacy 2019 ;Volum 13. s. 1-10

Gulin-Sarfraz, Tina; Jonasson, Sofia; Wigenstam, Elisabeth; von Haartman, Eva; Bucht, Anders; Rosenholm, Jessica M..

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Gulin-Sarfraz, Tina; Pryazhnikov, Evgeny; Zhang, Jixi; Khiroug, Leonard; Rosenholm, Jessica M..

Chemical and photonic interactions in vitro and in vivo between fluorescent tracer and nanoparticle-based scavenger for enhanced molecular imaging. Materials Today Bio 2019 ;Volum 2. s. 1-7

Kissi, Eric Ofosu; Khorami, Keyoomars; Rades, Thomas.

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